

---

# Zeitschrift für Physik A **Atomic Nuclei**

---

Editorial Board:

P. Armbruster, Darmstadt  
E. Bodenstedt, Bonn  
J. Deutsch, Louvain-la-Neuve  
B. Herskind, Roskilde  
C. Ngô, Gif-sur-Yvette

B. Povh, Heidelberg  
G. zu Putlitz, Heidelberg  
H.J. Specht, Heidelberg  
W. Weise, Regensburg  
T. Yamazaki, Tokyo

Editor in Chief:

H.A. Weidenmüller, Heidelberg

Unter Mitwirkung der Deutschen Physikalischen Gesellschaft

**Volume 329 • 1988**



Springer International

Founded in 1920. Edited with the collaboration of the Deutsche Physikalische Gesellschaft by K. Scheel and H. Geiger; Vols 124–141 (1947–1955) by M. v. Laue and R. W. Pohl; Vols 142–203 (1955–1967) by O. Haxel and H. Jensen; Vols 204–258 (1967–1973) by E. Fünfer, O. Haxel, H. Jensen, and G. Leibfried, from Vol. 259 by E. Fünfer, O. Haxel, G. Leibfried, and H.A. Weidenmüller. Vols 129–175 were produced with the collaboration of the Verband Deutscher Physikalischer Gesellschaften; from Vol. 176, the Deutsche Physikalische Gesellschaft. Published: Vols 1–4 (1921) Braunschweig, Fr. Vieweg & Sohn; Vol. 5 onwards, Berlin, Springer.

Starting with Vol. 272 (1975) *Zeitschrift für Physik* has been divided into two separate journals: *Zeitschrift für Physik A (Atoms and Nuclei)* and *Zeitschrift für Physik B (Condensed Matter and Quanta)*. The title *Zeitschrift für Physik B (Condensed Matter and Quanta)* has been changed to *Zeitschrift für Physik B (Condensed Matter)* from Vol. 38 (1980). In 1979 a third section was added: *Zeitschrift für Physik C (Particles and Fields)*. In 1986 *Zeitschrift für Physik D (Atoms, Molecules and Clusters)* was added and the title of *Zeitschrift für Physik A (Atoms and Nuclei)* changed to *Zeitschrift für Physik A (Atomic Nuclei)*.

**Copyright** Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review, or thesis), that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher; and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.

The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

**Special Regulations for Photocopies in the USA** Photocopies may be made for personal or in-house use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. This fee is US \$0.20 per page, or a minimum of US \$1.00 if an article contains fewer than five pages. All fees should be paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0930-1151, the volume, and first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.

Springer-Verlag Berlin, Heidelberg, New York, Tokyo—Printers: Universitätsdruckerei H. Stürtz AG, D-8700 Würzburg—Printed in Germany  
© Springer-Verlag Berlin, Heidelberg 1988—Springer-Verlag GmbH & Co. KG, D-1000 Berlin 33

## Contents Volume 329 (1988)

- Adamovich, M.I., see Bannik, B.P., et al. 341
- Ahmad, S.A., see Wendt, K., et al. 407
- Ameeva, B.U., see Bannik, B.P., et al. 341
- Andreev, V.P., Kravtsov, A.V., Makarov, M.M., Medvedev, V.I., Poromov, V.I., Sarantsev, V.V., Sherman, S.G., Sokolov, G.L., Sokornov, A.B., Trofimov, V.A.: Measurement of the Cross Section of the Reaction  $pp \rightarrow pp\pi^0$  in the Region of Dibaryon Resonances 371
- Andreeva, N.P., see Bannik, B.P., et al. 341
- Antonchik, V.A., see Bannik, B.P., et al. 341
- Anzon, Z.V., see Bannik, B.P., et al. 341
- Ardouin, D., Basrak, Z., Schuck, P., Peghaire, A., Delagrangé, H., Doubre, H., Grégoire, C., Kyanowski, A., Mittig, W., Peter, J., Saint-Laurent, F., Zwieglin, B., Viyogi, Y.P., Gelbke, C.K., Lynch, W.G., Maier, M., Pochodzalla, J., Quebert, J., Bizard, G., Lefebvres, F., Tamain, B.: Evidence for Persisting Mean Field Effects at  $E/A = 60$  MeV from Particle-Particle Correlation Measurements and Theoretical Investigations with the Landau Vlasov Equation (Short note) 505
- Avdeyev, S.P., Karnaukhov, V.A., Kuznetsov, V.D., Petrov, L.A.: On the Search for Density Isomers in Interaction of Relativistic  $^{12}\text{C}$  Nuclei with Lead 375
- Avetian, F.A., see Bannik, B.P., et al. 341
- Avrigeanu, M., Ivaşcu, M., Avrigeanu, V.: Pre-equilibrium Emission in Neutron Induced Reactions on  $^{54,56}\text{Fe}$  177
- Avrigeanu, V., see Avrigeanu, M., et al. 177
- Bacelar, J.C., see Hübel, H., et al. 289
- Bannik, B.P., El-Naghy, A., Krasnov, S.A., Shabratova, G.S., Tolstov, K.D., Ameeva, B.U., Andreeva, N.P., Anzon, Z.V., Bubnov, V.I., Chasnikov, I.J., Eremenko, L.E., Gaitinov, A.S., Kalyachkina, G.S., Kanygina, E.K., Shachova, T.I., Haiduk, M., Gitsok, M., Topor, V., Lepekhin, F.G., Simonov, B.B., Leskin, V.A., Salomov, D.J.A., Avetian, F.A., Kirshchan, V.M., Marutian, N.A., Sarkisian, V.R., Sarkisova, L.G., Karabova, M., Siles, E., Totova, M., Vokal, S., Antonchik, V.A., Bogdanov, S.D., Lihachev, A.J., Ostroumov, V.I., Bogdanov, V.G., Plyuschev, V.A., Solovieva, S.I., Adamovich, M.I., Harlamov, S.P., Cherniavsky, M.M., Larionova, V.G., Maslennikova, N.V., Orlova, G.I., Salmanova, N.A., Tretyakova, M.I., Shumbera, M., Kastanashvili, N.I., Serdamba, L., Togoo, R., Tuvdendorzh, D.: Observation of a Collective Flow in  $^{22}\text{Ne}$  Collisions with Ag (Br) Emulsion Nuclei at 4.1 A GeV/c 341
- Baran, A., see Łojewski, Z. 161
- Barden, R., Kirchner, R., Klepper, O., Plochoki, A., Rathke, G.-E., Roeckl, E., Rykaczewski, K., Schardt, D., Żylicz, J.: The Gamow-Teller Beta Decay of Neutron-Deficient Even Isotopes of Tin 319
- Barden, R., Plochoki, A., Schardt, D., Rubio, B., Ogawa, M., Kleinheinz, P., Kirchner, R., Klepper, O., Blomqvist, J.: Beta-Decay of  $27/2^-$  Isomers in  $N=83$  Nuclei 11
- Basrak, Z., see Ardouin, D., et al. (Short note) 505
- Bazzacco, D., Brandolini, F., Loewenich, K., Pavan, P., Rossi-Alvarez, C., De Poli, M., Haque, A.M.I., Bizzeti Sona, A.M., Blasi, P., Stefanini, A.A.: TDPAD g-factor Measurement of the  $21/2^+$  State in  $^{89}\text{Zr}$  429
- Beck, E.M., see Hübel, H., et al. 289
- Beck, F., see Gascon, J., et al. 139
- Becker, H.W., see Hilgemeier, M., et al. 243
- Becker, K., see Blatt, K., et al. 103
- Bengtsson, R., see Wyss, R.A., et al. (Short note) 255
- Berdichevsky, D., Fleming, R., Sprung, D.W.L., Tondeur, F.: Charge and Mass Radii of the Tin Isotopes 393
- Berinde, A., see Iacob, V.E., et al. (Short note) 381
- Bishop, P.J., see Luo, Y.-X., et al. (Short note) 125
- Bizard, G., see Ardouin, D., et al. (Short note) 505
- Bizzeti Sona, A.M., see Bazzacco, D., et al. 429
- Blasi, P., see Bazzacco, D., et al. 429
- Blatt, K., Becker, K., Heck, B., Jänsch, H., Leucker, H., Fick, D., Čaplar, R., Butsch,

- R., Möbius, K.-H., Ott, W., Paul, P., Stefens, E., Pochodzalla, J., Tungate, G.:  $^{23}\text{Na} + ^{23}\text{Na}$  Fusion with Unpolarized and Aligned Beams 103
- Blomqvist, J., see Barden, R., et al. 11
- Blomqvist, J., see Ercan, A., et al. 63
- Bogdanov, S.D., see Bannik, B.P., et al. 341
- Bogdanov, V.G., see Bannik, B.P., et al. 341
- Brandolini, F., see Bazzacco, D., et al. 429
- Brant, S., Paar, V.: IBFFM Yrast States in Odd-Odd Nuclei Associated with  $O(6)$  and  $SU(3)$  Limits 151
- Brant, S., Lheronneau, G., Stolzenwald, M.L., Sistemich, K., Paar, V.: Proton-Neutron Multiplets in  $^{96}\text{Y}$  301
- Brentano, P. von, see Reinhardt, R., et al. (Short note) 507
- Brentano, P. von, see Wirowski, R., et al. (Short note) 509
- Broda, R., see Ercan, A., et al. 63
- Bubnov, V.I., see Bannik, B.P., et al. 341
- Butsch, R., see Blatt, K., et al. 103
- Byrski, T., see Gascon, J., et al. 139
- Çaplar, R., see Blatt, K., et al. 103
- Carlé, P., see Käubler, L., et al. 143
- Carlos, P., see Ryckbosch, D., et al. 451
- Cassagnou, Y., see Cerruti, C., et al. (Short note) 383
- Cassing, W.: Dynamical Aspects of Intermediate-Energy Nucleus-Nucleus Collisions. III. Nonequilibrium Light Particle Emission 471
- Cassing, W.: Dynamical Aspects of Intermediate-Energy Nucleus-Nucleus Collisions. IV. Subthreshold Pion Production 487
- Castaños, O., Draayer, J.P., Leschber, Y.: Shape Variables and the Shell Model 33
- Cavinato, M., Marangoni, M., Saruis, A.M.: Charge Transition Densities for the Excitation and Nucleon Decay of the Giant Dipole Resonance in  $^{16}\text{O}$  463
- Cerruti, C., Hisleur, J.M., Julien, J., Legrain, R., Cassagnou, Y., Ribrag, M.: Search for Spontaneous Pion Emission from  $^{252}\text{Cf}$  Source (Short note) 383
- Chardalas, M., see Kreissl, A., et al. 235
- Chasnikov, I.J., see Bannik, B.P., et al. 341
- Cheema, T.S., see Sidhu, N.P.S., et al. 45
- Cherniavsky, M.M., see Bannik, B.P., et al. 341
- Cristancho, F., see Ulbig, S., et al. 51
- Daniel, H., see Kreissl, A., et al. 235
- De Poli, M., see Bazzacco, D., et al. 429
- Dedoussis, S., see Kreissl, A., et al. 235
- Delagrangé, H., see Ardouin, D., et al. (Short note) 505
- Delagrangé, H., see Grégoire, C., et al. 497
- Deleplanque, M.A., see Hübel, H., et al. 289
- Dewald, A., see Reinhardt, R., et al. (Short note) 507
- Dewald, A., see Wirowski, R., et al. (Short note) 509
- Diamond, R.M., see Hübel, H., et al. 289
- Dietrich, K., see Grégoire, C., et al. 497
- Dietrich, K., see Zwermann, W. 201
- Ding, Z., see Liu, Y., et al. 307
- Dobaczewski, J., Nazarewicz, W., Plochocki, A., Rykaczewski, K., Żylicz, J.: Structure of Nuclei near  $^{100}\text{Sn}$  and the  $\pi g_{9/2} \rightarrow \nu g_{7/2}$  Gamow-Teller Beta Decays 267
- Doubre, H., see Ardouin, D., et al. (Short note) 505
- Draayer, J.P., see Castaños, O., et al. 33
- Duchesnes, G., see Gascon, J., et al. 139
- Eberth, J., see Ulbig, S., et al. 51
- Egidy, T. von, see Kreissl, A., et al. 235
- Ekström, A., see Wendt, K., et al. 407
- El-Naghy, A., see Bannik, B.P., et al. 341
- Enghardt, W., see Käubler, L., et al. 143
- Ercan, A., Broda, R., Kleinheinz, P., Piipari, M., Julin, R., Blomqvist, J.: The Two Particle-Phonon Multiplet  $\pi h_{11/2} \nu f_{7/2} \times 3^-$  and Higher-lying Four-Nucleon Yrast States in the Doubly-Odd Nucleus  $^{146}\text{Eu}_{83}$  63
- Eremenko, L.E., see Bannik, B.P., et al. 341
- Faessler, A., see Ohtsuka, N. 89
- Fick, D., see Blatt, K., et al. 103
- Fieber, W., see Lister, C.J., et al. 413
- Fleming, R., see Berdichevsky, D., et al. 393
- Gaitinov, A.S., see Bannik, B.P., et al. 341
- Gascon, J., Beck, F., Byrski, T., Duchesnes, G., Haas, B., Merdinger, J.C., Nourreddine, A., Taras, P., Vivien, J.P.: Moderately Deformed Bands in the Continuum of  $^{144}\text{Gd}$  139
- Geiger, K., Reinhardt, J., Müller, B., Greiner, W.: Magnetic Moment Interactions in the  $e^- - e^+$  System 77
- Gelberg, A., see Reinhardt, R., et al. (Short note) 507
- Gelberg, A., see Wirowski, R., et al. (Short note) 509
- Gelbke, C.K., see Ardouin, D., et al. (Short note) 505
- Gitsok, M., see Bannik, B.P., et al. 341
- Glaudemans, P.W.M., see Poppelier, N.A.F.M. 275
- Godfrey, M.J., see Luo, Y.-X., et al. (Short note) 125
- Gomes, L.C., see Pato, M.P., et al. 189
- Gönnenwein, F., see Walliser, H., et al. 209
- Görres, J., see Wiescher, M. (Short note) 121
- Graf, St., Reinhardt, J., Müller, U., Müller, B., Greiner, W., Reus, Th. de, Soff, G.: Electronic Excitations in Heavy Ion Collisions with Sequential Fission 365
- Grégoire, C., Delagrangé, H., Pomorski, K., Dietrich, K.: Neutron Energy Distributions in the Dynamical Competition Between Evaporation and Fission 497
- Grégoire, C., see Ardouin, D., et al. (Short note) 505
- Greiner, W., see Geiger, K., et al. 77
- Greiner, W., see Graf, St., et al. 365
- Greiner, W., see Pop, A., et al. 357
- Grimes, S.M., see Strohmaier, B. 431
- Gross, D.H.E., see Pal, S. 349
- Haas, B., see Gascon, J., et al. 139
- Haiduk, M., see Bannik, B.P., et al. 341
- Hammer, J.W., see Hilgemeier, M., et al. 243
- Hancock, A.D., see Kreissl, A., et al. 235
- Haque, A.M.I., see Bazzacco, D., et al. 429
- Harlamov, S.P., see Bannik, B.P., et al. 341
- Hartmann, F.J., see Kreissl, A., et al. 235
- He, H.X., see Mobed, N., et al. 117
- Heck, B., see Blatt, K., et al. 103
- Heese, J., see Lister, C.J., et al. 413
- Heese, J., see Ulbig, S., et al. 51
- Heiss, W.D.: Exceptional Points of a Hamiltonian and Phase Transitions in Finite Systems 133
- Hernández, E.S., Mota, V. de la: Algebraic Solutions of Integrodifferential CRPA Equations 21
- Hilgemeier, M., Becker, H.W., Rolfs, C., Trautvetter, H.P., Hammer, J.W.: Absolute Cross Section of the  $^3\text{He}(\alpha, \gamma)^7\text{Be}$  Reaction 243
- Hisleur, J.M., see Cerruti, C., et al. (Short note) 383
- Hu, D., see Liu, Y., et al. 307
- Hübel, H., Murzel, M., Beck, E.M., Kluge, H., Kuhnert, A., Maier, K.H., Bacelar, J.C., Deleplanque, M.A., Diamond, R.M., Stephens, F.S.: High-Spin Spectroscopy of  $^{162}\text{Hf}$  289
- Iacob, V.E., Stan-Sion, C., Berinde, A., Neamu, I., Parlog, M., Scintei, N., Trache, L.: Excited Levels in the Neutron Deficient Nucleus  $^{111}\text{Sb}$  (Short note) 381
- Ivaşcu, M., see Avrigeanu, M., et al. 177
- Iwashita, T., see Sidhu, N.P.S., et al. 45
- Jäderholm, R., see Katajanheimo, R., et al. 1
- Jänsch, H., see Blatt, K., et al. 103
- Jenkins, I., see Luo, Y.-X., et al. (Short note) 125
- Johnson, A., see Wyss, R.A., et al. (Short note) 255
- Julien, J., see Cerruti, C., et al. (Short note) 383
- Julin, R., see Ercan, A., et al. 63
- Julin, R., see Katajanheimo, R., et al. 1
- Kalka, H., Seeliger, D., Zhivopistev, F.A.: Statistical Multistep Direct and Compound Processes below 30 MeV for 93-Nb 331
- Kalyachkina, G.S., see Bannik, B.P., et al. 341
- Kanert, W., see Kreissl, A., et al. 235
- Kanygina, E.K., see Bannik, B.P., et al. 341
- Karabova, M., see Bannik, B.P., et al. 341
- Karnaikhov, V.A., see Avdeyev, S.P., et al. 375
- Kastanashvili, N.I., see Bannik, B.P., et al. 341
- Katajanheimo, R., Jäderholm, R., Siivola, A., Julin, R., Liukkonen, E.: Low-Lying Excitations in the Odd-Odd Nucleus  $^{154}\text{Eu}$  1
- Käubler, L., Enghardt, W., Prade, H., Carlé, P., Norlin, L.O., Rensfelt, K.-G., Rosengård, U.: The Magnetic Moment of the  $10^+$  Isomer in  $^{140}\text{Ce}$  and  $E1$  Transitions in  $N=82$  Isotones Caused by Outer Subshell Configurations 143
- Khanna, F.C., see Mobed, N., et al. 117
- Kirchner, R., see Barden, R., et al. 11
- Kirchner, R., see Barden, R., et al. 319
- Kirshchan, V.M., see Bannik, B.P., et al. 341
- Kirwan, A., see Luo, Y.-X., et al. (Short note) 125
- Klein, A., Marshalek, E.R.: A New Deriva-

- tion of the Marshalek-Okubo Realization of the Shell-Model Algebra  $SO(2\nu+1)$  for Even and Odd Systems with  $\nu$  Single-Particle Levels 441
- Kleinheinz, P., see Barden, R., et al. 11
- Kleinheinz, P., see Ercan, A., et al. 63
- Klempt, W., see Wendt, K., et al. 407
- Klepper, O., see Barden, R., et al. 11
- Klepper, O., see Barden, R., et al. 319
- Kluge, H., see Hübel, H., et al. 289
- Koch, H., see Kreissl, A., et al. 235
- Koester, L., Waschkowski, W., Meier, J.: Experimental Study on the Electric Polarizability of the Neutron 229
- Köhler, Th., see Kreissl, A., et al. 235
- Kortelahti, M., see Wilmarth, P.A., et al. (Short note) 503
- Krasnov, S.A., see Bannik, B.P., et al. 341
- Kravtsov, V.A., see Andreev, V.P., et al. 371
- Kreissl, A., Hancock, A.D., Koch, H., Köhler, Th., Poth, H., Raich, U., Rohmann, D., Wolf, A., Tauscher, L., Nilsson, A., Sufert, M., Chardalas, M., Dedoussis, S., Daniel, H., Egidy, T. von, Hartmann, F.J., Kanert, W., Plendl, H., Schmidt, G., Reidy, J.J.: First Direct Observation of Strong Interaction Spin-Orbit Effects in Antiprotonic Atoms 235
- Kruchten, B. v, see Rychel, D., et al. (Short note) 123
- Kuhnert, A., see Hübel, H., et al. 289
- Kuznetsov, V.D., see Avdeyev, S.P., et al. 375
- Kyanowski, A., see Ardouin, D., et al. (Short note) 505
- Larionova, V.G., see Bannik, B.P., et al. 341
- Lefebvres, F., see Ardouin, D., et al. (Short note) 505
- Legrain, R., see Cerruti, C., et al. (Short note) 383
- Lepekhn, F.G., see Bannik, B.P., et al. 341
- Leprêtre, A., see Ryckbosch, D., et al. 451
- Leschber, Y., see Castaños, O., et al. 33
- Leskin, V.A., see Bannik, B.P., et al. 341
- Leucker, H., see Blatt, K., et al. 103
- Lhersonneau, G., see Brant, S., et al. 301
- Lieb, K.P., see Lister, C.J., et al. 413
- Lieb, K.P., see Ulbig, S., et al. 51
- Lieberz, W., see Reinhardt, R., et al. (Short note) 507
- Lieberz, W., see Wirowski, R., et al. (Short note) 509
- Lihachev, A.J., see Bannik, B.P., et al. 341
- Lister, C.J., Varley, B.J., Fieber, W., Heese, J., Lieb, K.P., Warburton, E.K., Olness, J.W.: Structure of High Spin States in  $^{83}\text{Y}$  413
- Liu, Y., Hu, D., Sun, H., Ding, Z.: Studies on the Low-Lying Levels in  $^{192}\text{Pt}$  and  $^{192}\text{Os}$  Populated in  $^{192}\text{Ir}$  Decay 307
- Liukkonen, E., see Katajanheimo, R., et al. 1
- Loewenich, K., see Bazzacco, D., et al. 429
- Łojewski, Z., Baran, A.: Half Lives of Heaviest Nuclei with Woods-Saxon Potential 161
- Love, D.J.G., see Luo, Y.-X., et al. (Short note) 125
- Luo, Y.-X., Zhong, J.-Q., Love, D.J.G., Kirwan, A., Bishop, P.J., Godfrey, M.J., Jenkins, I., Nolan, P.J., Mullins, S.M., Wadsworth, R.: A Superdeformed Band in  $^{131}\text{Ce}$  (Short note) 125
- Lynch, W.G., see Ardouin, D., et al. (Short note) 505
- Maier, K.H., see Hübel, H., et al. 289
- Maier, M., see Ardouin, D., et al. (Short note) 505
- Makarov, M.M., see Andreev, V.P., et al. 371
- Marangoni, M., see Cavinato, M., et al. 463
- Marshalek, E.R., see Klein, A. 441
- Marutian, N.A., see Bannik, B.P., et al. 341
- Maslennikova, N.V., see Bannik, B.P., et al. 341
- Medvedev, V.I., see Andreev, V.P., et al. 371
- Meier, J., see Koester, L., et al. 229
- Merdinger, J.C., see Gascon, J., et al. 139
- Michel, F., Reidemeister, G.: Connection of Kukulín's Nucleon-Nucleon Deep Potential with Realistic Repulsive Core Interactions 385
- Mittig, W., see Ardouin, D., et al. (Short note) 505
- Mobed, N., He, H.X., Khanna, F.C.: Quantum Corrections to Electro-Weak Form Factors of Nucleons in the Skyrme Model 117
- Möbius, K.-H., see Blatt, K., et al. 103
- Mota, V. de la, see Hernández, E.S. 21
- Müller, B., see Geiger, K., et al. 77
- Müller, B., see Graf, St., et al. 365
- Müller, U., see Graf, St., et al. 365
- Mullins, S.M., see Luo, Y.-X., et al. (Short note) 125
- Murzel, M., see Hübel, H., et al. 289
- Mylaeus, T., see Ulbig, S., et al. 51
- Nazarewicz, W., see Dobaczewski, J., et al. 267
- Nazarewicz, W., see Wyss, R.A., et al. (Short note) 255
- Neamu, I., see Iacob, V.E., et al. (Short note) 381
- Neugart, R., see Wendt, K., et al. 407
- Nilsson, A., see Kreissl, A., et al. 235
- Nitschke, J.M., see Wilmarth, P.A., et al. (Short note) 503
- Nolan, P.J., see Luo, Y.-X., et al. (Short note) 125
- Norlin, L.O., see Käubler, L., et al. 143
- Nourreddine, A., see Gascon, J., et al. 139
- Nyberg, J., see Wyss, R.A., et al. (Short note) 255
- Ogawa, M., see Barden, R., et al. 11
- Ohtsuka, N., Faessler, A.: Inclusion of the  $\Delta$  Resonance in the Optical Potential Between Two Nuclei and its Application to Medium Energy  $^{12}\text{C}-^{12}\text{C}$  Scattering 89
- Oliveira, E.C., see Pato, M.P., et al. 189
- Olness, J.W., see Lister, C.J., et al. 413
- Orlova, G.I., see Bannik, B.P., et al. 341
- Osipowicz, T., see Ulbig, S., et al. 51
- Ostroumov, V.I., see Bannik, B.P., et al. 341
- Ott, W., see Blatt, K., et al. 103
- Otten, E.W., see Wendt, K., et al. 407
- Paar, V., see Brant, S. 151
- Paar, V., see Brant, S., et al. 301
- Pal, S., Gross, D.H.E.: One-Body Nuclear Friction 349
- Parlog, M., see Iacob, V.E., et al. (Short note) 381
- Pato, M.P., Oliveira, E.C., Gomes, L.C.: A Comparison of the Gaussian Approximation and Langevin's Simulation in DIC 189
- Paul, P., see Blatt, K., et al. 103
- Pavan, P., see Bazzacco, D., et al. 429
- Peghaire, A., see Ardouin, D., et al. (Short note) 505
- Peter, J., see Ardouin, D., et al. (Short note) 505
- Petrov, L.A., see Avdeyev, S.P., et al. 375
- Physics and Astronomy Classification Scheme (PACS) 127
- Piiparinen, M., see Ercan, A., et al. 63
- Plendl, H., see Kreissl, A., et al. 235
- Plochocki, A., see Barden, R., et al. 11
- Plochocki, A., see Barden, R., et al. 319
- Plochocki, A., see Dobaczewski, J., et al. 267
- Plyushchev, V.A., see Bannik, B.P., et al. 341
- Pochodzalla, J., see Ardouin, D., et al. (Short note) 505
- Pochodzalla, J., see Blatt, K., et al. 103
- Pomorski, K., see Grégoire, C., et al. 497
- Pop, A., Săndulescu, A., Scutaru, H., Greiner, W.: Charge Equilibration Mode as a Open Quantum System 357
- Popelier, N.A.F.M., Glaudemans, P.W.M.: Particle-Hole Excitations in the  $^{208}\text{Pb}$  Mass Region 275
- Poromov, V.I., see Andreev, V.P., et al. 371
- Poth, H., see Kreissl, A., et al. 235
- Prade, H., see Käubler, L., et al. 143
- Quebert, J., see Ardouin, D., et al. (Short note) 505
- Raich, U., see Kreissl, A., et al. 235
- Rathke, G.-E., see Barden, R., et al. 319
- Rech, M., see Rychel, D., et al. (Short note) 123
- Reidemeister, G., see Michel, F. 385
- Reidy, J.J., see Kreissl, A., et al. 235
- Reinhard, P.-G.: The Nonlinearity of the Scalar Field in a Relativistic Mean-Field Theory of the Nucleus 257
- Reinhardt, J., see Geiger, K., et al. 77
- Reinhardt, J., see Graf, St., et al. 365
- Reinhardt, R., Dewald, A., Gelberg, A., Lieberz, W., Schiffer, K., Schmittgen, K.P., Zell, K.O., Brentano, P. von: Low Spin Structure of  $^{128}\text{Xe}$  (Short note) 507
- Rensfelt, K.-G., see Käubler, L., et al. 143
- Reus, Th. de, see Graf, St., et al. 365
- Ribrag, M., see Cerruti, C., et al. (Short note) 383
- Roeckl, E., see Barden, R., et al. 319
- Rohmann, D., see Kreissl, A., et al. 235
- Rolfs, C., see Hilgemeier, M., et al. 243
- Rosengård, U., see Käubler, L., et al. 143
- Rossi-Alvarez, C., see Bazzacco, D., et al. 429
- Rubchenya, V.A., Yavshits, S.G.: Dynamic Treatment of Ternary Fission 217



- Rubio, B., see Barden, R., et al. 11  
 Rychel, D., Krüchten, B. v. Rech, M., Speer, J., Schürmann, B., Wiedner, C.A.: Inelastic  $\alpha$ -scattering from  $^{100}\text{Mo}$  (Short note) 123  
 Ryckbosch, D., Carlos, P., Lepêtre, A.: Hybrid Model Analysis of Intermediate Energy ( $20 < E_\gamma < 140$  MeV) Photoneuclear Reactions on  $^{232}\text{Th}$  and  $^{235,238}\text{U}$  451  
 Rykaczewski, K., see Barden, R., et al. 319  
 Rykaczewski, K., see Dobaczewski, J., et al. 267  
 Sahota, H.S., see Sidhu, N.P.S., et al. 45  
 Saint-Laurent, F., see Ardouin, D., et al. (Short note) 505  
 Salewski, H., Schmidt-Ott, W.-D.:  $EC/\beta^+$  Ratio and  $\beta$ -Delayed  $\gamma$ -Decay of  $^{146}\text{Eu}$  169  
 Salmanova, N.A., see Bannik, B.P., et al. 341  
 Salomov, D.J.A., see Bannik, B.P., et al. 341  
 Săndulescu, A., see Pop, A., et al. 357  
 Sarantsev, V.V., see Andreev, V.P., et al. 371  
 Sarkisian, V.R., see Bannik, B.P., et al. 341  
 Sarkisova, L.G., see Bannik, B.P., et al. 341  
 Sarma, A., Singh, R.: Statistical Analysis of  $^{24}\text{Mg} + ^{24}\text{Mg}$  Elastic and Inelastic Scattering 195  
 Saruis, A.M., see Cavinato, M., et al. 463  
 Schardt, D., see Barden, R., et al. 11  
 Schardt, D., see Barden, R., et al. 319  
 Schiffer, K., see Reinhardt, R., et al. (Short note) 507  
 Schmidt, G., see Kreissl, A., et al. 235  
 Schmidt-Ott, W.-D., see Salewski, H. 169  
 Schmittgen, K.P., see Reinhardt, R., et al. (Short note) 507  
 Schmittgen, K.P., see Wirowski, R., et al. (Short note) 509  
 Schuck, P., see Ardouin, D., et al. (Short note) 505  
 Schürmann, B., see Rychel, D., et al. (Short note) 123  
 Scintei, N., see Iacob, V.E., et al. (Short note) 381  
 Scutaru, H., see Pop, A., et al. 357  
 Seeliger, D., see Kalka, H., et al. 331  
 Serdamba, L., see Bannik, B.P., et al. 341  
 Shabrato, G.S., see Bannik, B.P., et al. 341  
 Shachova, T.I., see Bannik, B.P., et al. 341  
 Sherman, S.G., see Andreev, V.P., et al. 371  
 Shumbera, M., see Bannik, B.P., et al. 341  
 Sidhu, N.P.S., Cheema, T.S., Iwashita, T., Sahota, H.S.: Decay Studies of  $^{131}\text{Ba}$  45  
 Siivola, A., see Katajaneheimo, R., et al. 1  
 Siles, E., see Bannik, B.P., et al. 341  
 Simonov, B.B., see Bannik, B.P., et al. 341  
 Singh, R., see Sarma, A. 195  
 Sistemich, K., see Brant, S., et al. 301  
 Soff, G., see Graf, St., et al. 365  
 Sokolov, G.L., see Andreev, V.P., et al. 371  
 Sokornov, A.B., see Andreev, V.P., et al. 371  
 Solovieva, S.I., see Bannik, B.P., et al. 341  
 Speer, J., see Rychel, D., et al. (Short note) 123  
 Sprung, D.W.L., see Berdichevsky, D., et al. 393  
 Stan-Sion, C., see Iacob, V.E., et al. (Short note) 381  
 Stefanini, A.A., see Bazzacco, D., et al. 429  
 Steffens, E., see Blatt, K., et al. 103  
 Stephens, F.S., see Hübel, H., et al. 289  
 Stolzenwald, M.L., see Brant, S., et al. 301  
 Strohmaier, B., Grimes, S.M.: Spectral Distribution Calculations of the Level Density of  $^{20}\text{Ne}$  431  
 Suffert, M., see Kreissl, A., et al. 235  
 Sun, H., see Liu, Y., et al. 307  
 Tamain, B., see Ardouin, D., et al. (Short note) 505  
 Taras, P., see Gascon, J., et al. 139  
 Tauscher, L., see Kreissl, A., et al. 235  
 Togoo, R., see Bannik, B.P., et al. 341  
 Tolstov, K.D., see Bannik, B.P., et al. 341  
 Tondeur, F., see Berdichevsky, D., et al. 393  
 Topor, V., see Bannik, B.P., et al. 341  
 Toth, K.S., see Wilmarth, P.A., et al. (Short note) 503  
 Totova, M., see Bannik, B.P., et al. 341  
 Trache, L., see Iacob, V.E., et al. (Short note) 381  
 Trautvetter, H.P., see Hilgemeier, M., et al. 243  
 Tretyakova, M.I., see Bannik, B.P., et al. 341  
 Trofimov, V.A., see Andreev, V.P., et al. 371  
 Tungate, G., see Blatt, K., et al. 103  
 Tuvdendorzh, D., see Bannik, B.P., et al. 341  
 Ulbig, S., Cristancho, F., Heese, J., Lieb, K.P., Osipowicz, T., Wörmann, B., Eberth, J., Mylaeus, T., Wiosna, M.: Two-Quasiparticle Bands in  $^{72}\text{Br}$  51  
 Varley, B.J., see Lister, C.J., et al. 413  
 Vierinen, K., see Wilmarth, P.A., et al. (Short note) 503  
 Vivien, J.P., see Gascon, J., et al. 139  
 Viyogi, Y.P., see Ardouin, D., et al. (Short note) 505  
 Vokal, S., see Bannik, B.P., et al. 341  
 Wadsworth, R., see Luo, Y.-X., et al. (Short note) 125  
 Walliser, H., Wildermuth, K., Gönnerwein, F.: Remarks on a Quantum Mechanical Treatment of Internal Excitation in Low Energy Nuclear Fission 209  
 Warburton, E.K., see Lister, C.J., et al. 413  
 Waschkowski, W., see Koester, L., et al. 229  
 Wendt, K., Ahmad, S.A., Ekström, C., Klempt, W., Neugart, R., Otten, E.W.: Hyperfine Structure and Isotope Shift of the Neutron-Rich Barium Isotopes  $^{139-146}\text{Ba}$  and  $^{148}\text{Ba}$  407  
 Werth, A. von der, see Wirowski, R., et al. (Short note) 509  
 Wiedner, C.A., see Rychel, D., et al. (Short note) 123  
 Wiescher, M., Görres, J.:  $^{29}\text{P}(p,\gamma)^{30}\text{S}$  in Explosive Hydrogen Burning (Short note) 121  
 Wildermuth, K., see Walliser, H., et al. 209  
 Wilmarth, P.A., Nitschke, J.M., Vierinen, K., Toth, K.S., Kortelahti, M.: Beta-Delayed Proton Decay of the  $N=83$  Precursor  $^{153}\text{Yb}$  (Short note) 503  
 Wiosna, M., see Ulbig, S., et al. 51  
 Wirowski, R., Yan, J., Dewald, A., Gelberg, A., Lieberz, W., Schmittgen, K.P., Werth, A. von der, Brentano, P. von: High Spin States in the Closed-Neutron-Shell Nucleus  $^{142}\text{Nd}$  (Short note) 509  
 Wolf, A., see Kreissl, A., et al. 235  
 Wörmann, B., see Ulbig, S., et al. 51  
 Wyss, R.A., Johnson, A., Nyberg, J., Bengtsson, R., Nazarewicz, W.: Competition between  $(h_{11/2})^2$  Proton and Neutron Excitations around  $^{128}\text{Ba}$ : Coexistence of Near Prolate and Near Oblate Shapes at High Spin (Short note) 255  
 Yan, J., see Wirowski, R., et al. (Short note) 509  
 Yang, X.J., see Zhang, J.S. 69  
 Yavshits, S.G., see Rubchenya, V.A. 217  
 Zell, K.O., see Reinhardt, R., et al. (Short note) 507  
 Zhang, J.S., Yang, X.J.: The Pauli Exclusion Effect in Multiparticle and Hole State Densities 69  
 Zhivopistev, F.A., see Kalka, H., et al. 331  
 Zhong, J.-Q., see Luo, Y.-X., et al. (Short note) 125  
 Zwermann, W., Dietrich, K.: Further Tests Concerning the Origin of the Sideward Flow 201  
 Zwięgliński, B., see Ardouin, D., et al. (Short note) 505  
 Żylicz, J., see Barden, R., et al. 319  
 Żylicz, J., see Dobaczewski, J., et al. 267

Indexed in *Current Contents*  
 Evaluated and abstracted  
 for PHYS on STN